OVEMBER/DECEMBER 1975

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JAN 5 1976
MIAMI, FLORIDA

# The Florida Architect

61st CONVENTION COVERAGE
GOLD MEDAL TO SMITH

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# The Florida Architect

Volume 25 Number 6 November/December 1975

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**THE FLORIDA ARCHITECT,** Official Journal of the Florida Association of the American Institute of Architects, Inc., is owned and published by the Association, a Florida Corporation not for profit. It is published bi-monthly at the Executive Office of the Association, 7100 N. Kendall Drive, Miami, Florida 33156. Telephone (305) 661-8947. Opinions expressed by contributors are not necessarily those of the Editor of the Florida Association of the AIA. Editorial material may be reprinted provided full credit is given to the author and to **THE FLORIDA ARCHITECT** and copy is sent to publisher's office. Single Copies, 75 cents, subscription, $6.50 per year. **Controlled Circulation Postage Paid, Miami, Florida**

# Letters

Dear Editor:

I was touched by the sympathy expressed in the beautiful spray of flowers sent by Dan's professional colleagues. As the opportunity arises, please convey the gratitude of the Hart family to members of the Executive Board of the Florida Association of Architects.

Most sincerely,

Marjorie Hart
(Mrs. R. Daniel Hart)

Dear Editor:

Thank you again for your affording me the opportunity to be a participant in the 1975 Florida AIA Convention. You should be pleased and derive a great deal of personal satisfaction from putting together not only an outstanding convention, but a viable AIA organization.

I deeply appreciate the courtesy extended to me and hope, if you are ever in Chicago, I might have an opportunity to return your hospitality.

Sincerely,

Thomas J. Eyerman
Partner – Skidmore, Owings & Merrill
Chicago, Ill.

Dear Editor:

I would like to express my appreciation for the Presidents Award that you gave me at your recent convention.

It is doubly gratifying to receive an award for working at a job that I have enjoyed for many years. One of the primary reasons for this is the great people in your profession that I have met and worked with.

Jane joins me in thanking the association for the hospitality shown us at the Orlando Hyatt House.

One more note – I would like to commend Fotis Karousatos for his part in the convention and especially the banquet.

Yours very truly,

Otis Dunan
President
Dunan Brick Yards, Inc.
Miami, Fla.

Dear Editor:

Some fine examples of good architecture were recognized in the October 1975 issue of The Florida Architect, but why reward another *windowless schoolhouse?*

The Francis Bellamy School in Tampa appears to be another example of misinformed educators and simplistic architecture combining to harass the students.

Nils Schweizer's article on energy conservation places the burden on architects who have been designing with total disregard for the environment.

Why do we reward a windowless schoolhouse? This is a prime example of the backwardness we architects have achieved.

The energy and economic crisis will remain for the next decade. Awaken Architects! Remember well what our past masters have taught us. Stand up and be counted.

Keep up the good quality of this publication.

Very truly yours,

F. Louis Wolff
F. Louis Wolff Associates
Ft. Lauderdale

Dear Editor:

I want to thank the FAAIA Board of Directors, the Awards Committee, the FAAIA membership, and you for a kind reception and very pleasurable evening on October 4th. The Award of Merit which I received is deeply appreciated because the highest goals of the architect's profession have become important to me. I am happy to have been able, in a very limited way, to participate in these goals.

Sincerely,

Sam Gowan
Assistant Director
For Special Resources
University of Florida
Gainesville

Dear Editor:

I don't know when I have more enjoyed a working assignment! Your attention to our needs and comforts, the hospitality of all your colleagues, and the calibre of the program people you put together for me to work with made my role a treat.

Thank you for inviting us to take part.

I recall you saying you have a list of the names and addresses of the members who attended. A lot of people asked me for some followup material and if there is such a list it would be helpful.

Most cordially,

Weld Coxe
Coxe Associated, Inc.
Philadelphia, Pa.

Dear Editor:

I want to personally commend you, your staff and the Florida Association of the A.I.A. for a "Super Convention"! It was undoubtedly the best I've ever attended. I'm very happy to see the strong direction established

Continued on FA/17

*THE FLORIDA ARCHITECT encourages communications from its readers. We invite you to address all correspondence to: Editor, THE FLORIDA ARCHITECT, Suite 203, 7100 N. Kendall Drive, Miami, Florida 33156. It is assumed that any letter, unless otherwise stipulated, is free for publication in this journal.*

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# 61st CONVENTION COVERAGE

Architects from all over the state gathered for the 61st Annual Convention and Building Products Exhibit sponsored by the Florida Association of the American Institute of Architects.

The Convention, held October 2 – 5, was attended by more than 500 – one of the largest turnouts in recent years.

Its theme . . . IMPACT . . . was the topic of William W. Caudill, FAIA. Caudill was the initial speaker and he spoke of the *7 IMPACTS: Forces Shaping Architectural Practice.* (The Florida Architect feels his words are worth repeating and have reprinted his speech beginning on FA 20.)

New FAAIA Officers were voted in by acclamation. Awards were presented. Speakers were heard. Exhibits were viewed and discussed. Those who attended lead and learned and laughed. They made this convention a most successful one.

The convention camera and note pad were there, too. The pictures and words in this issue tell the story about IMPACT – the 61st Annual Convention and Building Products Exhibits.


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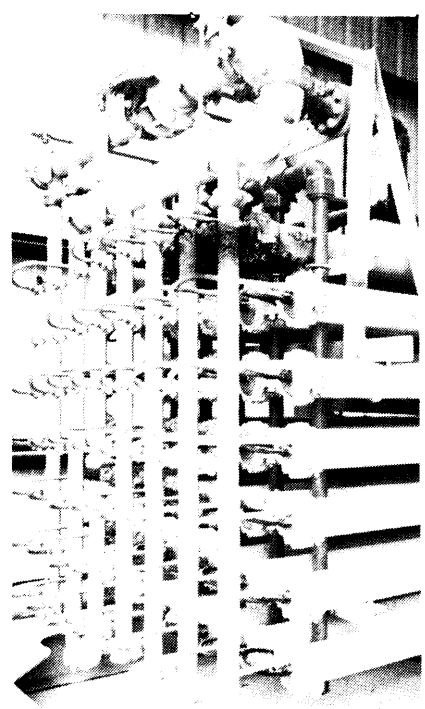

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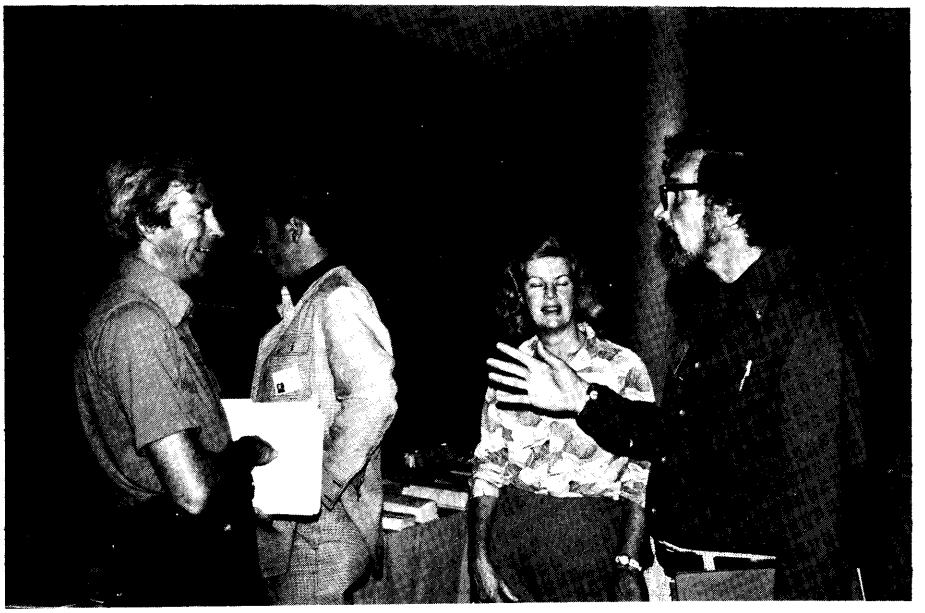

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1. A scene at the *Registration Desk*. Left to right, are, Weld Coxe, one of the Convention speakers, Fotis Karousatos, Hon. AIA, Executive Director of FAAIA, Mrs. Georgia Coxe, and, Jerry James, AIA, Convention Chairman.

2. President James E. Ferguson, Jr., AIA, cuts the ribbon officially opening the Building Products Exhibit.

3. Left to right, Robert Grof, AIA, James Austis, AIA, and Robert Gunderson, AIA, pictured at the Delegate Accreditation Desk registering John McCormick, Jr., AIA.

# 1976 FAAIA Officers

New FAAIA Officers and Executive Committee were elected for the coming year. Pictured, left to right, are: Ellis W. Bullock, Jr., AIA, Vice President/President Elect; Carl Gerken, AIA, Secretary; James A. Greene, AIA, Treasurer; Nils M. Schweizer, FAIA, President; Frank R. Mudano, AIA, Regional Director; Herbert R. Savage, AIA, Regional Director; J. Michael Huey, General Counsel, and Fotis Karousatos, Hon. AIA, Executive Director.

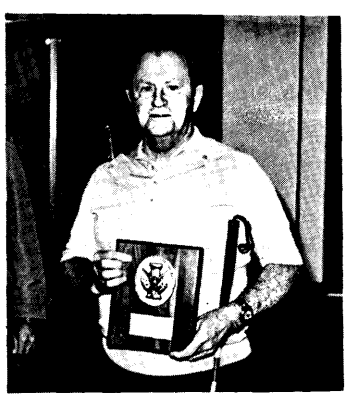
## THOMAS C. RUFF and JIFFY BLUEPRINT WIN TOP AWARDS at 61st 'BUILDING PRODUCTS EXHIBIT'

FAAIA members and guests had the opportunity to view the latest in new products at the Building Products Exhibits facet of the 61st Annual Convention.

There were standouts, but the Association selected two exhibits to honor.

Thomas C. Ruff and Company of Maitland and Jiffy Blueprint of Clearwater were chosen as the winning exhibitors.

The 1975 Exhibit Award for Display Excellence was garnered by Thomas C. Ruff, and Jiffy Blueprint took the 1975 Exhibit Award for Educational Value of Display.



Jiffy Blueprint's John Hannigan takes the award for his company.

John Chambliss of Thomas C. Ruff receives his company's award.

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AWARDS . . . AWARDS . . . AWARDS . . . AWARDS . . . AWARDS . . .

## BOCHIARDY RECEIVES ANTHONY L. PULLARA MEMORIAL AWARD

The framers of the Anthony L. Pullara Memorial Award felt they would like to recognize and individual who best carried on the tradition of service exemplified by Tony.

Howard B. Bochiardy, AIA, is the recipient of the 1975 Anthony L. Pullara Award as the Outstanding Individual for Service to the Association.

Bochiardy has been active in Florida Education as the AIA Representative of the Dean Search Committee and Curriculum Committee for the development of a new College of Architecture at Florida A & M University. He was instrumental in helping organize a group to develop courses of study for Architectural Para-Professionals.

He is President of the University of Florida Architectural Guild, Commissioner of Education and Research for the FAAIA and State Director for the Mid Florida Chapter AIA.

## ANTHONY L. PULLARA AWARD TO FLORIDA CENTRAL CHAPTER

The Florida Central Chapter is this year's winner of the Anthony L. Pullara Memorial Award. Robert Levision, Chapter President, accepted the award.

The Award was established in 1965 to honor the life of a dedicated man, Anthony L. Pullara. He gave full time to the profession of architecture and was an active Regional Director of the American Institute of Architects representing Florida. While he was the State Legislative Chairman, he carried on an exhaustive schedule working on legislative programs.

Framers of the Memorial Awards said, "It is hoped that these awards will perpetuate Tony's memory and those things for which he stood for in our profession."

It seems fitting that the Chapter to which he was so closely tied would carry on his memory.

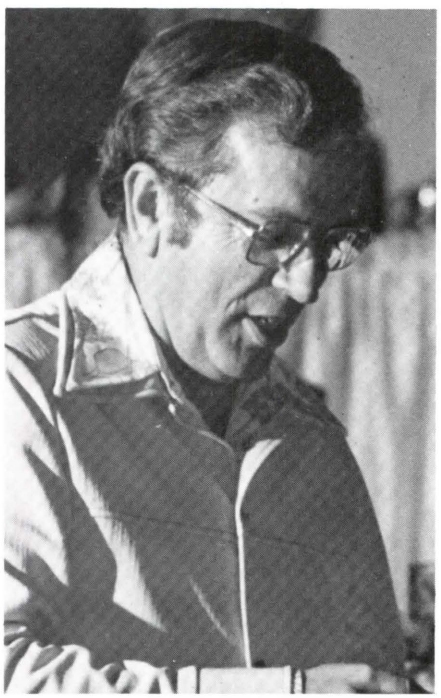
## ARCHITECT COMMUNITY SERVICE AWARD WON BY BILL EPPES

The recipient of the 1975 Architect Community Service Award is Bill G. Eppes, AIA.

The Award is presented to the architect whose active leadership in community activities and service has been a direct benefit to the community in which he lives.

Eppes has been active with the Alachua County Charrette. The purpose of the Charette is to educate the public and gain awareness of critical concern in Alachua County. He is presently President and director of activities and presides at all steering committee meetings, giving direction to the total organized effort. On several occasions he has appeared on television and radio to inform and describe the Charette activities.

Eppes practices Architecture in Gainesville and also teaches in the Department of Building Construction at the University of Florida. He has served as Vice President and President of the Florida North Chapter of the AIA.

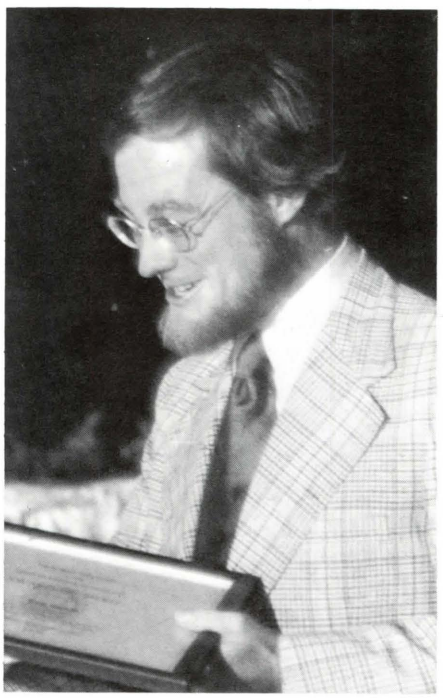


## AWARD OF MERIT TO TELEVISION NEWSMAN MARSHALL CLEAVER

Marshall S. Cleaver, WLCY-TV Director of News and Public Affairs, won an Award of Merit.

Cleaver has been instrumental in communicating architectural accomplishments of the Central Florida area for many years. He has produced television programs promoting outstanding architecture.

He has assisted the Florida Central Chapter as well as the Florida Association with design awards just as he did at the recent FAAIA Convention.



## ASSOCIATION AWARD OF MERIT TO SAM GOWAN

Sam Gowan, assistant Director of Special Resources for the University of Florida Libraries, was presented an Award of Merit for his leadership in preservation of the architectural heritage.

Gowan's interest in architectural preservation is well-known in the Gainesville area. Through enthusiasm, knowledge and skill, he accomplished work which other experienced preservationists had considered impossible.

He sponsored throughout Alachua County an inventory of buildings over 50 years old. He was instrumental in the conception, organization and realization of Historic Gainesville, Inc., a non-profit corporation dedicated to architectural and urban preservation.

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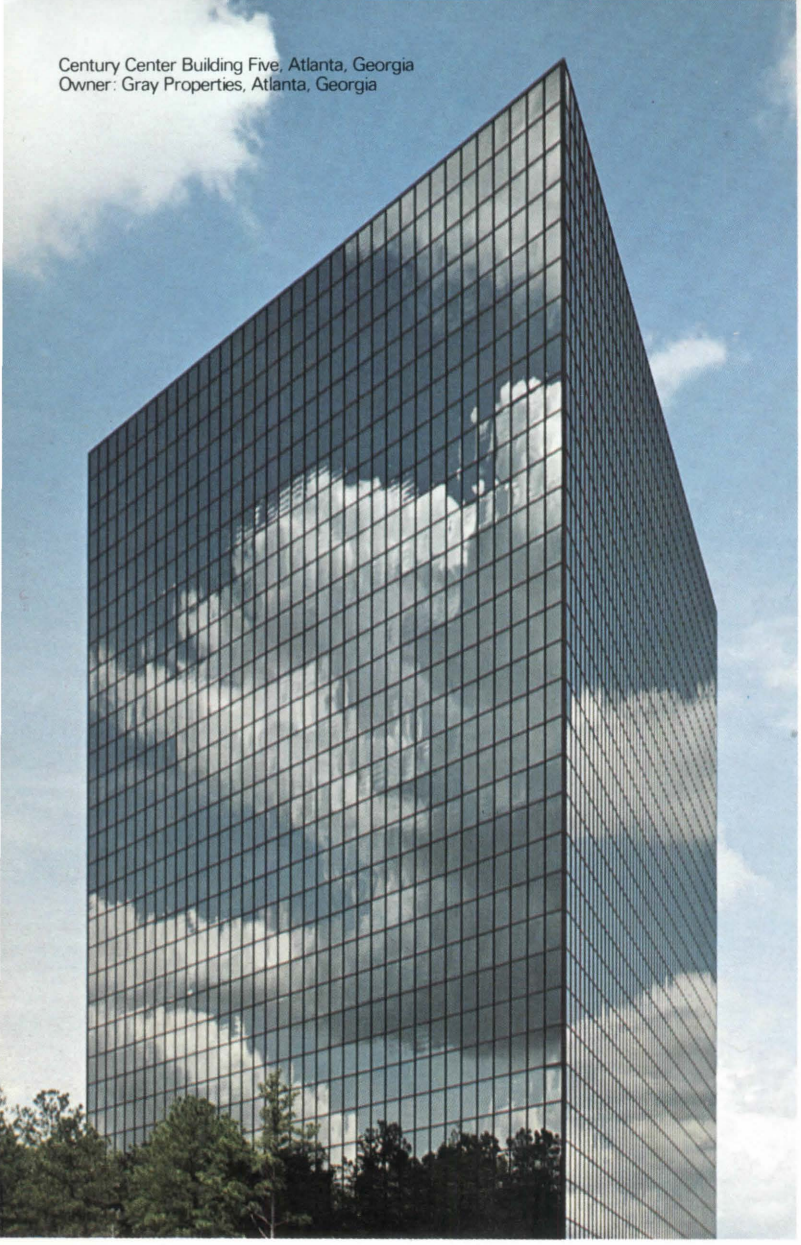
1. FAAIA Board of Directors meeting.
2. Convention scene at the Building Materials International booth.
3. H. Leslie Walker, FAIA, left, receives a gift of appreciation for his 3 years service as Regional Director from Florida to the AIA National Board of Directors.
4. Architects and their ladies trip the light fantastic.
5. AIA Leadership Workshop for new Chapter Officers.
6. James A. Greene, AIA, Treasurer, explains the 1976 budget and the proposed new dues structure.
7. President James E. Ferguson, Jr., AIA, makes his farewell address . . .
8. . . . and, accepts his gift as out-going President. (What is Jim telling his new Egret? )

# Neuhaus + Taylor and PPG.



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PPG Solarban® 550-8 Twindow® insulating glass is the skin on all three of these buildings.

But they don't all have the same glass merely because they had the same architect.

The projects presented similar problems.

All the buildings were speculative. And all are in the South (two in Atlanta, one in Tampa).

So they all had to have the kind of esthetics that would please the tenants and the kind of economies that would profit the owners. (Especially, economical air conditioning to handle the hot Southern summers.)

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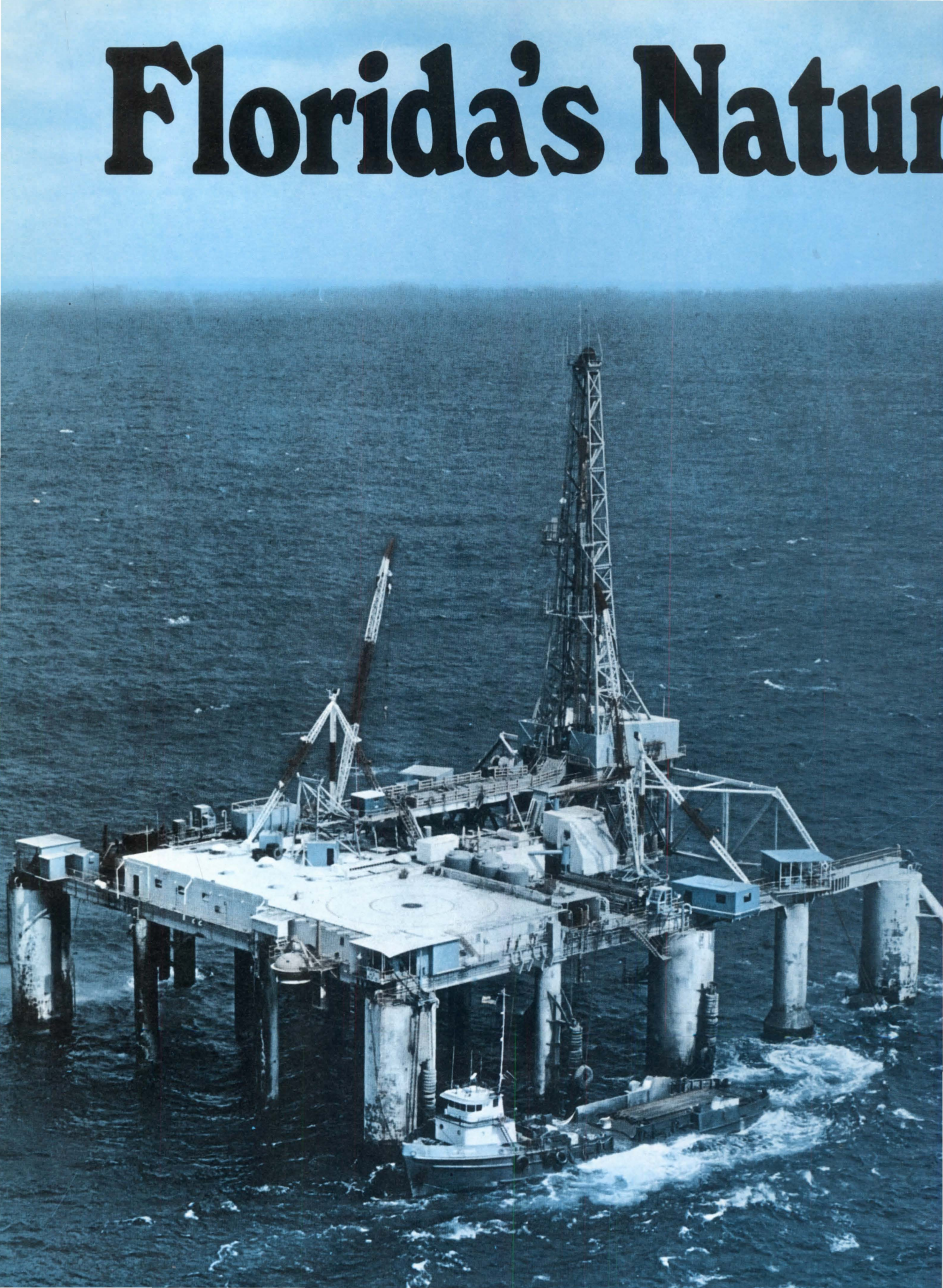


# l Gas Supply...

## ...we're going to have enough!

An analysis of natural gas availability in Florida today, presented by the Florida Natural Gas Association.

**What are the facts behind the supply of natural gas?**

Natural gas consumption has exceeded new discoveries for a number of years. However, if natural gas is deregulated, the industry feels we should see an increase in drilling and exploration when wellhead prices are permitted to seek a level at which gas can again be developed and produced at maximum efficient rates.

**Can residential and commercial customers be sure they will not have their gas cut due to lack of supply?**

Yes. We do not anticipate any difficulties in continuing to serve these customers. Our market mix and temperate climate means residential and commercial customers will not have service interruptions as may be the case in other parts of the nation. The industry expects increased drilling and further exploration will insure that these customers will continue to receive sufficient quantities of natural gas for their present and foreseeable needs. As a backup measure, in the event of further natural gas supply depletions, we could augment distribution by supplying synthetic gas as was done prior to the introduction of the natural gas pipeline in 1959.

**Who will be affected most by any potential shortage?**

Primarily, Florida's industrial customers. They will continue to receive less natural gas if the shortage condition continues. However, industrial customers are on interruptible natural gas service and have stand-by sources for fuel in the event of a curtailment of supply.

**What is the natural gas industry doing to prevent current shortages and meet future demands in Florida?**

We are joining in the national effort to support deregulation of prices and are engaging in an increased oil and gas exploration program in the vicinity of our pipeline sources. We are also encouraging the conservation of gas by homeowners and other consumers.

**Can you as an architect, contractor, or engineer specify natural gas for commercial and residential projects with confidence?**

Yes. The natural gas industry is over 150 years old, and has a superior record of dependability. It is still today's best energy buy. For example, the use of electric power for heat requires the expenditure of over 2.5 times more natural fuel than would be used in direct-fired heat-producing equipment such as gas furnaces, water heaters, ranges and clothes dryers.
It all boils down to this... you can rely on gas people thoughout the state to continue serving you with safe, economical, dependable gas. We don't intend to let the pilot lights go out in Florida.

## The Florida Natural Gas Association

David M. Lapham, President, P.O. Box 610907 • North Miami, Florida 33161

# Smith Awarded Gold Medal

Hilliard T. Smith, Jr., FAIA, received the 1975 prestigious Gold Medal Award during award festivities at the 61st Annual Convention.

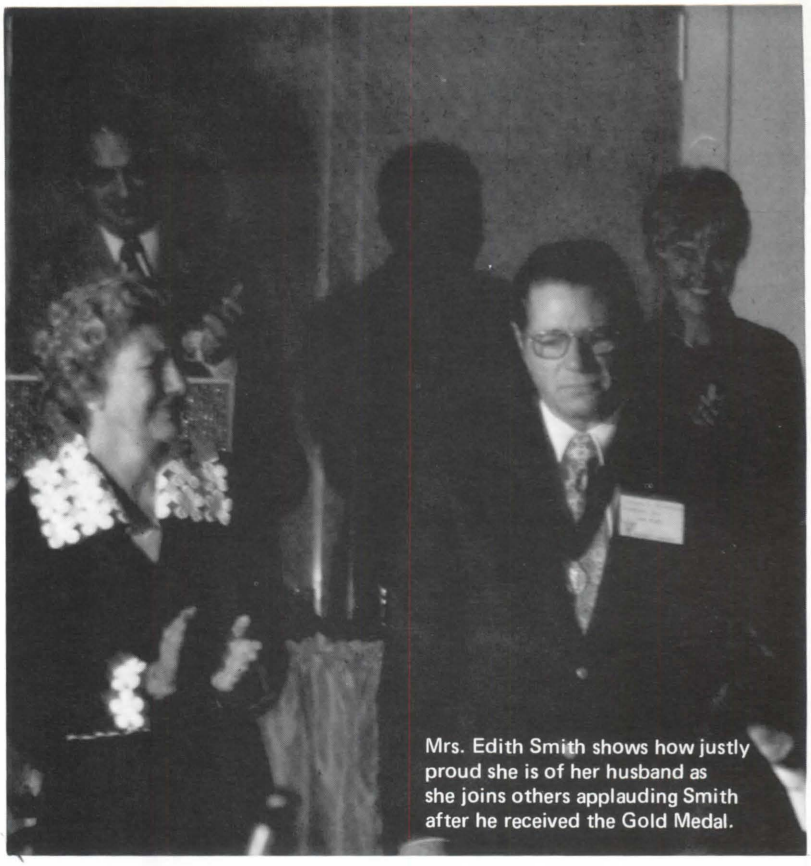
The Gold Medal is the highest award the Association can give and is presented to an individual architect who has performed most distinguished leadership and service to the Association over an extended length of time.

Smith has served his profession with the Palm Beach Chapter, the Florida Association of the AIA, for many years. He is a valued leader with his local chapter and held the Presidency in 1962.

For three years, 1963-1965, he served on the Board of Directors of the Florida Association. In 1966 he was elected Vice President/President Elect and in 1967 assumed the office of President of the Association.

During 1968-69, when he did not have an official position with the Association, Smith continued to work for his profession and served on National AIA Committees.

In 1970 he assumed the position, to which he was elected in 1969, of Florida Regional Director representing the profession on the Board of Directors of the American Institute of Architects. He served in this position until 1973. But in May of that year, at the National AIA Convention in San Francisco, Smith was elected Secretary of the AIA. He was re-elected to that position in 1974 and still serves.



Mrs. Edith Smith shows how justly proud she is of her husband as she joins others applauding Smith after he received the Gold Medal.

President Ferguson, AIA presents Gold Medal Award to Smith, FAIA.

# Letters

Continued from FA/4

by this convention toward strong learning sessions and not just social and Association business sessions.

I also want to thank you and the Association for the Honorable Mention Design Award we received for our Bellamy Elementary School. I won't argue with the jury's comments at this time, but I do think they probably missed some of the most significant points of the Bellamy design.

1. The school was *designed, built and occupied* in a total of *fourteen months*, a process which had never previously been accomplished in less than two year's time.
2. It was constructed for *$19.50 per sq. ft.* and *$300,000 under the School Board's budget.* This was accomplished by our office using a *phased bidding, fast-track, construction management approach* which required us to administer *twelve separate contracts.*
3. We also had the *responsibility and control of all interior design and furnishings*—a first in this County and perhaps in the State.
4. We performed these services under a very unique fee arrangement with the School Board wherein we received a basic percentage fee of the final construction cost plus another higher percentage fee of all dollar savings under their budget.
5. The school's namesake is the author of the Pledge of Allegiance (not the Star Spangled Banner as reported by the Florida Architect), who, incidentally, spent the final 20 years of his life in Tampa, Florida.

I really feel that of all those honored this project was probably the most germane to this convention's theme and I was probably negligent for not bringing that to the convention's attention at the time of receiving the award, but I felt it might not have been appropriate.

Thank you again for a great convention.
Sincerely,

H. Dean Rowe, A.I.A.
Rowe Holmes Associates, Inc.
Tampa

Dear Editor:

We were impressed with the article "Inmates Learn Drafting" in the September-October issue of the Florida Architect. I was wondering if your company could possibly donate four copies of the September-October issue of the Florida Architect so that I could give one copy to our Drafting instructor, two copies to the student and still have a copy to keep in my office.

Thank you for your consideration in this matter.

Sincerely yours,

Walter D. Ramos
Vocational Coordinator
State of Florida
Division of Corrections
Raiford, Florida

*(John E. Stefany, A.I.A., will continue to serve as a member of the State of Florida's Department of Education Advisory Council on Environmental Education. The Florida Architect is pleased to reprint the following exchange of letters from Commissioner Ralph D. Turlington and Stefany.)*

Mr. John E. Stefany
Florida Association of the
American Institute of Architects
102 Whiting Street
Tampa, Florida 33602

Dear Mr. Stefany:

In order to ensure participation by related private organizations, other state agencies, and interested lay persons in the planning and implementation of the recently established office of environmental education in the Department of Education, an advisory council has been appointed to review progress and to make recommendations to my office and staff for future activities in this area.

Your high degree of interest, broad background of training, and experience qualify you exceptionally well for appointment to this council. Consequently, I am pleased to invite you to become a member.

It is anticipated that meetings will be called at intervals that will not constitute an undue imposition on your time. Mr. C. Richard Tillis, Director, Office of Environmental Education, will work directly with the group.

I shall appreciate your accepting this assignment and an early letter from you indicating your willingness to serve.

Sincerely,

Ralph D. Turlington
Commissioner
Department of Education
State of Florida

The Honorable Ralph D. Turlington
Commissioner
State of Florida
Department of Education
Tallahassee, Florida 32304

Dear Commissioner Turlington:

In response to your recent letter requesting that I continue to be a member of the State of Florida's Department of Education Advisory Council on Environmental Education, I am pleased to accept this invitation to remain a member.

Those of us who have served on the committee as well as great many people both within and beyond the State of Florida who know of the accomplishments that this program has achieved are enthusiastic supporters of the program. I am a member of the National Committee on Environmental Education of the American Institute of Architects and currently chair its task force on legislature which is using Florida's experiences as an example from which to draft model legislature. It is satisfying to know that the rest of our country can look to Florida as a leader in this field.

Sincerely,

John E. Stefany
Architect, A.I.A.

## PRESIDENT'S AWARD TO DUNAN BRICK'S OTIS E. DUNAN

Otis E. Dunan, President of Dunan Brick, is the winner of the 1975 President's Award.

Dunan received the award during the Awards Banquet at the FAAIA's 61st Annual Convention & Building Products Exhibits in Orlando. This award is presented to an individual who is considered to have given continuous support to the profession of architecture in Florida.

Dunan has been a brick and building products supplier in South Florida since 1935. He has been an active member of the South Florida Chapter of the Producers Council, has served as President of the Greater Miami Manufacturer's Association and is past Chairman of the Greater Miami Industrial Exposition.

A regular at the meetings of the Florida Chapter of the AIA, he has given support and helped support fine architecture in South Florida.

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# Board of Directors Policy Statement

*The following is a Policy Statement which has been prepared by the Board of Directors of the Florida Association of the American Institute of Architects regarding the proposed State Building Code to be effective by January 1, 1977, as set forth in House Bill No. 3231 of the legislature of the State of Florida.*

*As Architects, we are pleased to see legislation being undertaken to unify the standards for construction throughout the State. We are hopeful that with these uniform standards the State will also take the opportunity to establish uniform interpretation of those standards and to enact uniform qualifications of the officials charged with their enforcement. Only in this manner will the construction industry be truly aided by the legislation; and the best interest of the residents of the State of Florida be uniformly and efficiently served.*

*We, the members of the Board of Directors of the Florida Association of the American Institute of Architects, wish to express our opinion regarding the character and quality of the proposed State Building Code, in hopes that our comments might offer some guidance and assistance in the deliberations that you are about to undertake.*

1. *As Architects, we are concerned about a code which would not provide for innovative design by assuming the responsibility for design that should rightly be left to the licensed professionals.*
2. *As innovators, we seek a new code which will readily permit changes in technology to be incorporated into acceptance.*
3. *As parties responsible to budgetary limits, we are concerned about codes which are unnecessarily restrictive and proprietary in nature. Such a code favors special interest groups, eliminates competition, and increases cost.*
4. *As practitioners who provide services throughout the southeast United States, we hope the code will be structured in a manner that typifies the major established life safety standards presently recognized on a regional-wide basis.*
5. *As professionals constantly trying to keep abreast of code changes, we hope the new code will not require a tremendous transitional period resulting from the reeducation of both the design professionals and the enforcers of the new code.*
6. *Finally, as tax payers we are concerned about the creation of a new State Department to administer and maintain such a code, whose staffing demands would further tax the State budget while providing services which may be readily available through private enterprise at little or no cost to the tax payer.*

*Mindful of these objectives, we further recognize:*

1. *The Southern Building Code Congress and its family of building codes including the Standard Building Code are performance codes which specify minimum requirements for fire and life safety and delegate the design responsibility to the design professional.*
2. *The Standard Building Code is presently used in over 2,000 jurisdictions in 21 southeast states; including the greater majority of Florida communities.*
3. *The Southern Building Code Congress is continuously endeavoring to unify their requirements with other nationally recognized life safety codes toward a uniform standard across the nation.*
4. *The Southern Building Code Congress regularly reviews and adopts changes in materials and construction systems in a continuing effort to be current with new building trends as they are developed.*
5. *The Standard Building Code can and is frequently amended on local levels to adjust to specialized community concerns.*
6. *The Standard Building Code is easy to use, familiar to most professionals in the State, and established in the majority of its interpretations.*
7. *The Standard Building Code can be adopted by the State of Florida at no charge; and published at competitive cost through private enterprise.*

*We, the members of the Board*

Continued on FA/26

7 IMPACTS:

# Forces Shaping Architectural Practice

**William W. Caudill, FAIA**
**Chairman of the Board**
**Caudill Rowlett Scott, Inc.**

**Speech presented to the 61st Annual FAAIA Convention**

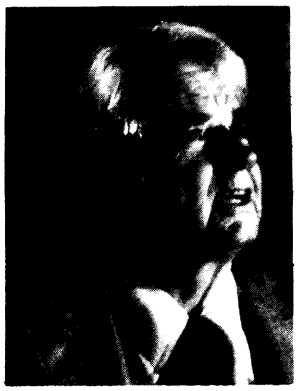
IMPACT? At this 61st annual convention, "impact ,,impact" implies an impelling or compelling effect on our society, society meaning the Florida Association of AIA. But that's too pluralistic. Your concern (and mine) is not so much with what's going to happen to society. It is:

WHAT IS GOING TO HAPPEN TO YOU (AND ME)?

Damned if I know. That lost my credibility.

Five years ago I never could have guessed how I'd be practicing today. Or rather, how my partners would be practicing — so that I could attend meetings like this and, in my magnificent ignorance, tell people like you what you will be doing five years from now.

But I'm no fool. I'm not up here soloing. With me are the notions and words of people smarter than I. I did my homework. I got help. I've asked respected thinkers to identify certain impacts which will shape the five-year future of architectural practice. These impacts fall under seven headings:
(1) GOVERNMENT,
(2) RECYCLING,
(3) CONSUMERISM,
(4) ACCOUNTABILITY,
(5) PROFESSION,
(6) PROCESS and
(7) PRODUCT.



***William W. Caudill, FAIA,***

Here goes. But first let me warn you — what I'll tell you will sound negative. Change generally does. But if we as architects conduct our affairs with wisdom and enthusiasm, we will not be left naked and destitute by the winds of change, as the old cliche goes.

**IMPACT NO. 1 — GOVERNMENT**
GET SET FOR MORE G.I. (government-issued) DIRECTIVES.

Years ago when our firm made the jump from Texas to New York, I was shocked at the amount of governmental interference during the design process. "These Northeasterners are over-civilized," I said, "too many codes, too many agencies, too many town meetings, too many groups from which to get approvals." I see this same complexity of process heading south — and fast. Local and state governments want part of the action in the design process. They'll get it.

The U.S. government is already asking more services from practitioners by demanding life-cycle costing which may prove that the more expensive quality item may cost less in the long run. Makes sense. But makes more work during design, too.

Dr. James R. Wright, National Bureau of Standards, says that the government is especially concerned with life safety. He writes, "Life safety, particularly that aspect attributed to fires, will impact building design. Worth noting is the Federal Fire Prevention and Control Act that was signed into law in October 1974."

Jeff Corbin, who heads CRS' Interiors/Graphics Croup, also emphasizes life safety when he refers to new tough governmental guidelines addressing flammability. "These," he said, "will naturally affect the nature and cost of materials and furnishings used in interiors of buildings."

You'll begin to think that regulatory agencies know only how to add. Damn few know how to subtract. I don't see a tapering off of the government telling us what to do. I can only see more government involvement. That will be an impact.

**IMPACT NO. 2 — RECYCLING**
RECYCLING WILL BECOME A STRONG IMPACT.

Bob Blaich, who heads Design for Herman Miller Inc., commented this way, "Recycling is with us and it demands a different attitude and variable skills not inherently at play in many architectural firms. Were I starting in business today, I would concentrate on this problem." So we better learn the art of rejuvenating buildings. We have an attitudinal change ahead of us. That's the toughest kind.

When I contacted my sources, I said make your statement short. Steve Kliment, architect/editorial consultant in New York, wins the prize for brevity. He responded with three words, "Conserve our neighborhoods." Knowing Steve, I can assure you there is a hell of a lot of intellectual content behind this classic example of verbal economy. Recycling the neighborhood may mean saving this very nation. Kliment's comment goes beyond Architecture.

Max De Pree, Chairman of the Board of Herman Miller said this, "Wouldn't it be great if new buildings could be designed in such a way that they offered the users that liberated feeling one has in using a grand old building." Bullseye! When old buildings are successfully recycled, they generally make new buildings feel sterile. New buildings, therefore, will have a new yardstick for measuring quality based on the same quality of fine old buildings.

Dr. Harold B. Gores, President of Educational Facilities Laboratory, Inc., New York, gave this picturesque statement,

"Except for housing, we are overbuilt. As the population in our big cities continues to thin out, leaving empty buildings on the beach as the tide goes out, many more architects will have to develop expertise in designing and specifying the interiors of existing shells."

Corbin backs this up with this statement, "Because of the increasing costs of new construction, the renovation of existing structures will become more and more viable both economically and politically."

Gores, however, in his inimitable way, addresses this message to architects: "Be of good cheer — the world is wearing out. Whatever the hazards of the next few years, be of good cheer, because at the rate we are currently undermaintaining our properties, *America will have to be built again in a few years.*" See, I told you it was not going to be *all* negative.

**IMPACT NO. 3**
**CONSUMERISM**
ARCHITECTS WILL BE AFFECTED BY THE RISE OF CONSUMERISM.

Max De Pree says, "More and more people are insisting on their right of involvement in the building process, partly because they get better value working for themselves, and partly because they have a strong need for a personal involvement in their own environment." The users are not sitting back anymore, letting the professionals tell them what to do, then quietly paying the bill for the mysterious services rendered.

You already know what is happening to Law. The legal profession, under consumer pressure, is searching for ways to bring its services within the financial and comprehensive reach of everyone. It's succeeding, too. All professions are affected. The guy on the street is beginning to have a say. Standard fees are being questioned, even outlawed. Horrors! They are monkeying with our code of ethics. Dr. Gores states, "The tighter money gets, the greater will be the pressure on all the professions (including architecture) employing standard fee schedules. Both Federal Government and consumer groups are targeting on licensed professionals whose fees may be set by profession rules and agreements, or by State law. Doctors, lawyers, pharmacists, dentists and even funeral directors are already caught in the net." Architects next? It's a good bet. And when this happens, our current code of ethics will be obsolete. A lot of us have already experienced the shock of change from the impact of consumerism.

**IMPACT NO. 4 —**
**ACCOUNTABILITY**
ARCHITECTS WILL HAVE TO BE MORE ACCOUNTABLE

Today clients tend to think architects are rather lax with their (the clients') money. There will be a day of reckoning. My partner, Tom Bullock, who serves on the AIA Board, spells it out in no uncertain terms, "We must be accountable — not only for good design but for cost estimates that are right, and for scheduling that is real." He adds this corker, "Architects might have to become the builder to assure these things." Bullock continues, "Within five years the real 'master builder' will emerge. It could be architects." He adds, "Design solutions will require more services, more creative processes, and more total delivery commitment than today's traditional process." If architects don't respond, someone else will. We can't hide anymore from responsibilities.

Dr. Gores beautifully sums up the case for more accountability this way: "A companion impact to rising consumerism will be increased demand for accountability. This has already happened in education, and will intensify in architecture, but probably not to the intensity in ancient Rome where an architect, having designed an arch, was expected to stand under the keystone as it was being inserted into place. If the arch failed, the architect was the first to know. This, presumably, was known as instant accountability."

When Gores says it, it's said. So much for the impact of accountability.

**IMPACT NO. 5 —**
**PROFESSION**
THE PROFESSION WILL CHANGE — AND FAST. FAST?

The world is moving too fast to see beyond five years. We used to think of long-range plans as 20-year plans. Now a long-range plan is a five-year plan. Things have changed drastically during the past five years, but it seems to me the profession hasn't kept up. A few individuals, yes. A few firms, yes. But as a whole, the architectural profession hangs tough to a limited-scope, no-risk, all important notion of what an architect is. The public won't continue to buy this over-inflated self-portrait of the architect. Or his services. People are damn tired and disgusted with the building industry. They attribute to architects much of the indecisiveness, time-consuming complexity, and expensive manner of getting a building up.

As already stated, the public is demanding accountability. Many owners think they can get it — not through the usual architectural services, but through construction management, fast tracking, even through total services relating to design, construction and financing. The buying public doesn't give a tinker's damn about the prerogatives, the safeguards or the limits of architectural services or about ethics. It just wants to get the job done efficiently and economically — no matter who does it or how.

Bullock states, "The AIA has got to decide whether it is going to be only a society for architects, who design buildings, or whether it is going to open its membership to specialists like construction management people, behavior space planners, town planners and building-type engineers. And once we open up to them," he asks, "can the AIA keep these specialists within the membership if we continue to legislate their behavior based on our present ethics."

I don't know where I first heard this. It might have been Frank Lloyd Wright, but I completely agree with the person who said, "We should change the name of the AIA to 'the American Institute of Architecture.'" Architecture is a lot more important than architects. We have a moral obligation to give architecture to the majority. In sum, we are in the Pushed Profession. We better respond.

**IMPACT NO. 6 —**
**PROCESS**
PRESSURES WILL INCREASE FOR NEW PROCESS IN PRACTICE.

Dave Bullen, working with John Eberhard and the AIA Research Corporation last year, trying to get on

CONTINUED

*William W. Caudill, FAIA*

top of changes, says, "Tell them that the next five years will see significant changes in the architectural profession in three major areas: attitude, process and product. The right attitude will be acceptance of the energy acknowledged as major parts of design solutions." Regarding process, "life-cycle costing will become standard procedure," according to Bullen, and "the use of the computer will increase for both energy analysis and life-cycle costing."

Regarding product, "Count on it," he says, "form will change."

Architect Charles Thomsen, President of CM Associates, a construction management firm, succinctly states, "Despite the impotent philosophizing of the zealots for building systems and the antizealots against building systems, each year sees more construction done in factories and less custom field construction." The use of industrialized building systems is not a passing fancy.

Jonathan King, who helped pioneer modern-day building systems and knows their strengths and weaknesses if anyone does, says this about the future of systems, "In years to come, architects will have different sets of problems and constraints, but look forward to increasing use of industrialized building systems."

Continued on FA/23

**GEORGE T. HEERY, FAIA**
*President and Chairman*
*Heery and Heery, Atlanta*

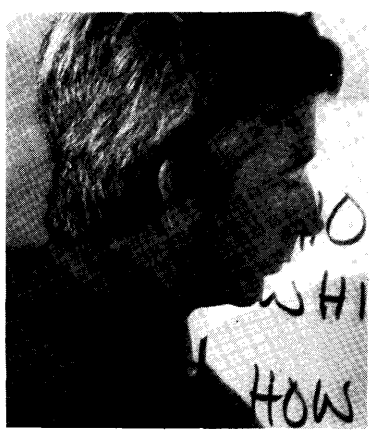
. . . talked and showed slides on the IMPACT of Construction Management.

**R. RICHARD RITTLEMAN, AIA**
*Principal*
*Burt, Hill & Assocs., Butler, Pa.*

. . . stressed the technical aspect of energy conservation.

**THOMAS J. EYERMAN, AIA**
*General Partner*
*Skidmore, Owings & Merrill, Chicago*

. . . addressed delegates on how to improve earnings by improving management skills.



**WELD COXE**
*Management Consultant*
*Weld Coxe Assocs.*

. . . spoke on how to make effective interview presentations.

**LOUIS DE MOLL, FAIA**
*President – Elect AIA*
*Chairman of the Board*
*Ballinger Company, Philadelphia*

. . . told members what the future of the profession holds.

However, systems scare designers. Most don't like these erector sets. They don't want to work in the constraints of systems. When systems were first used with fast tracking and construction management, designers in CRS barely survived the trauma. Our people suffered shock — the shock of change. If your firm hasn't yet, it will.

But, Thomsen, says, "Change has to come, if only to satisfy the demands of *time.* Our clients today consider *time* very important." Count on it, time will become even more important. "Inflation continues," says Thomsen, "but inflation is not the only pressure on time. The owner wants immediate results. He wants the building up — ready to move into before high interest rates rack his budget." George Heery, I'm sure, will spell this out in greater detail tomorrow morning.

Management void has been filled primarily by general contractors, a few construction management companies, and a number of clients, but very few architects. The future will belong to those who build the capability and produce the results wherever they may come from. The profession needs to develop new strengths. So do each of us. We have to flex with the change.

**IMPACT NO. 7 — PRODUCT**

CHEAP LABOR. CHEAP ENERGY. WENT THE WAY OF THE BUFFALO.

Forrest Wilson, Chairman of the Department of Architecture and Planning, Catholic University of America, put it uniquely: "The age of great discoveries is over. The search for innovation in building seems the same as the search for oil. All the easy-to-find fields have been discovered. The search for oil today is incredibly more sophisticated than it was a century ago. So is the search for new ways of building." Wilson attributes this to the increasingly higher cost of labor, coupled with its increasing inefficiency. Building "now employs assemblers, not craftsmen," he says. That's why building systems are coming into the picture so strongly. No more cheap labor. And no more really skilled labor.

Throughout my lifetime, first cost was the prime consideration — "Make it cheaper." Not now. And not from here on. There are two pressures on us: First cost *and* life-cycle cost. What this means is that we must develop new skills to negotiate the trade-offs between cutting first cost and achieving long-range operational efficiencies and economies. It won't be easy.

Back to Dr. James Wright (National Bureau of Standards) and to the no-cheap energy notion: "Energy use and energy conservation will impact building design. With the rising cost of fuels and the large amount of fuels used in buildings, the application of existing technology could have a dramatic impact on the way architects design buildings." He goes on to say that architects will have to recognize the potential of solar energy. "Technology for solar energy systems is still developing and will continue to do so over time, but for the moment most solar energy equipment is very large and bulky. (I might add: and very expensive). The very nature of the equipment and its size will present a tremendous challenge to the designers of buildings as they attempt to integrate these large panels and massive structures into their buildings. Architects will have to draw upon all of their creative talents." Believe him. He's right.

One of my favorite architects — in fact a person very dear to me — said this, "Energy conservation as a design determinant will be the name of the game these next five years. The energy crisis could have much more impact on building design than the great 'form givers' of the last three decades — architects like Frank Lloyd Wright, Le Corbusier, Mies Van Der Rohe, Walter Gropius and Louis Kahn. Energy will be the new form giver." Who said that? I did.

**WRAP-UP**

Am I preaching doom? No. I'm convinced architects have an exciting, satisfying, profitable future. Am I just scaring you to get your attention? Of course not. I'm not kidding. We are under pressure this very day. These seven impacts are real. They'll create more pressure in the immediate five-year future.

So what else is new? The architectural profession has always had its pressures. It'll survive — if it responds. In fact, it can thrive.

Once (at the turn of the century) we were pressured to get out of building construction. We did. Now we are being pressured to get back in. We may. Architects respond to pressures, despite what our worst critics say. But there is nothing wrong with bringing pressure to bear on our profession or any other profession. Change is not likely without pressure. And change is needed. Big, fast change — like it or not.

I've given you seven impacts — impacts which will cause architects to change their attitudes and ways of doing things. These are only a few.

I'm eager for change. You should be too. We should look forward to the immediate five-year future shaped by these seven impacts. What a great time to reassess our worth. Should we *be?* Or shouldn't we be? It's time to remind ourselves that architects are not here to perpetuate their profession, but to serve people by creating buildings which possess architecture. Once we stop serving, we lose our justification for existence. Today we have an opportunity to re-establish that we are a life-improving, contributing profession. And we can contribute. What a unique place we have among all profession.

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PART II

# Energy and Architecture in Florida

By Nils M. Schweizer, FAIA

Years ago the prophecy of function in architecture was discussed by Frank Lloyd Wright as he talked about human and organic unity within building structures and the relationship of the building to the climatic conditions, to the site, the weather, etc.. Other architects in this country have espoused for the past several decades, the European school of architecture which has dealt with shapes that basically express function in purely aesthetic and "humanistic" terms. It may be we need to once again revisit Frank Lloyd Wright's concept of "organic" with **all** its implications.

It stands to reason, in terms of energy, the initial things that we need to be concerned about in terms of new buildings are: 1) orientation in terms of the suns heat in our southern climate; and 2) the shape of that building in relationship to both the environment (basically sun, wind and vegetation) and in relationship to the interior functions it begins to serve. This becomes an extremely complex set of competing values and must be recognized as such if we are going to produce the kinds of buildings that will be responsive to design for conservation programs. A lifecycle cost analysis program formally introduces a program which can act as a design tool for a structure which has as many as eight sides.

**Total energy systems** are a means to cut line losses inherent in the central generation of electrical power. It also provides for heat sources for use in a major complex of buildings. While it may be difficult to match loads, it is always worth investigating.

**Insulation** – The one facet of new buildings with the most substantial immediate and potential benefits to energy conservation is insulation. "U" value is the combined thermal value of different materials creating a surface from interior to exterior. It simply expresses the ease with which heat passes through the construction of that surface. The lower the "U" value, the better the insulation. Typical values are as follows: 1.13 for a sheet of glass; .85 for 4" of solid concrete and .06 for good exterior stud wall with 3-1/2" of fiberglas insulation. The state in its review of its new statewide building code is encouraging higher insulation standards in buildings.

The general growing opinion is that "U" values for all surfaces, rooks and dide walls should not exceed the .06 "U" value, in terms of practical economics.

**Minimum surface area and architectural shapes to improve the insulating properties.** The extreme theoretical case is the geodesic dome. This design produces the minimum surface area for a given amount of cubage. An energy efficient structure is the one-half cube shape with surfaces of equal "U" values. This is a simplistic theoretical model which is highly artificial because it does not discuss window openings, glass, etc.. However, it does approach an excellent model and says something to us in terms of the high rise buildings we have been creating.

People have asked how to insulate the roof of a building without using the energy intensive fiberglas insulation. In the traditional alpine houses the roofs are pitched to carry snow as insulation throughout the cold winter. In this climate there are such things as earth masses on roofs with gards on top which could provide the amount of mass that would effectively deal with insulating qualities. There is also the practice of a 3" to 4" sheet of water on flat concrete

*In part two, the conclusion of Schweizer's article, he discusses the role of New Structure Design and future Alternative Energy Systems. (Please refer to the September/October issue for Part I of "Energy and Architecture.")*

roofs whose evaporative capabilities can act as a cooling agent.

**Glass** – The reduction of glazed areas in a building is important as well as shading the windows. New situations constantly occur in terms of new forms for self-shading and inward sloping walls which produce new shapes.

There are many special ways of glazing being evolved in terms of air conditioning. There is heat absorbing glass and there is also reflective glass. Glass has stimulated the awesome solar heat problems in large high rise glass buildings. Everybody wants to build a glass tower. This has come to us from Meis Van der Roe and the marvelous glass housing he conceived. Our lesser imitations in architecture have presented us with extremely difficult problems in terms of energy conservation. Glass may be used in different sealed combinations with clear plate to produce different values of transmission. In this, the process of conduction, radiation and convection occur. Obviously, window shutters become a vital factor in both retrofitting and new structures. It is interesting to note that when we review our exposure to the climatic systems all wind calculations are based on no movement (or maximum movement) and we often forget this fact.

**The efficiency of heating and cooling systems** – More sensitive thermostats, more automatic controls and centralized plants generally contribute to energy savings as well as reviewing the new variable volume systems in place of the old heating and A.C. systems which are generally wasteful.

**Heat pumps** – It is a well known fact that heat pumps are particularly efficient in Florida. Both in terms of the heating capacity and their excellent and efficient cooling.

**Artificial mechanical ventilation** – We have discussed this kind of ventilation in terms of retrofitting. At this point in time 5, 10, and 15 cubic feet per minute are standards for various types of structures. These could be reduced to 3 to 4 cubic feet per minute in most areas which should include charcoal filter systems as well as other systems for cleaning air.

**Heat exchangers** were also previously discussed. These devices are available which can recapture the "heat" or "cool" before it is exhausted from the building and transfer a portion of the heat or cool to the incoming air supply. This will reduce the amount of energy required to heat or cool all of the incoming air.

**Window shading** has been discussed. Elaborate devices are in the process of being manufactured. Often glass set in deep reveals can make a significant difference. A self-shading effect either by a balcony or a floor or trees or sloped wall can provide energy efficiency.

The last in the list is the cost of energy to produce building materials themselves. One analysis showed it would take .77 million kwh of electrical energy to produce 5.7 million pounds of stainless steel to cover the surface of a high rise. As compared to the greater figure of 2.1 million kwh to cover this same surface with 4 million pounds of aluminum. However, the lifecycle cost analysis has not become this sophisticated to date though it may well in the future begin to deal with net energies involved; this becomes an obvious goal in the process of energy conservation.

## Alternative Energy Systems

Much work to date is being done on alternative energy systems. The one of the greatest of these for the area of Florida is the solar collector. This solar collector, through hot water, heats both water and space and does it excellently in terms of today's technology. It is estimated that 13.9% of national energy usage is in the residential area in these terms. Approximately an 8% of the national energy used is in commercial struc-

CONTINUED

## Energy and Architecture in Florida

Continued from FA/25

tures in terms of both water and space heating. Many people are now working on the process in which solar energy can provide air conditioning systems with enough heat for the absorption process.

The solar collector occurs in all parts of the world at this point. There are over 2-1/2 million in Japan, as far as we know there are probably 60,000 in operation in Florida. They are in operation in California and Australia. Israel has the largest desalinization plant in the world run by solar energy. Among other alternatives which are being pursued are: windmills, fuel cells, hydrogen produced by the electrolysis of water, latent heat storage mechanisms and geothermal possibilities as well as wave action. However, it should be recognized that most alternative systems and their refinements, with the exception of water and space heating by solar energy, are still in the future. A conservative estimate would be 5 to 10 years.

In summary, retrofitting whether "leak plugging" or "belt tightening" can conserve a minimum of 30% of our energy costs. It is of equal importance in the design of new structures that all professionals, involved in the process, begin the design process as a team and that all available design processes such as lifecycle analysis become tools as an initial step in the process. We have two alternatives for the next 5-10 years. We must begin to design energy efficient buildings or we will slowly bankrupt ourselves as a state and a nation. The erosion process leading to bankruptcy is without reality to most of us because it is insidiously working 24 hours a day. We therefore must, as a profession, become committed to conservation in both the private, and public aspects of our lives.

## POLICY STATEMENT

Continued from FA/19

*of Directors of the Florida Association of the American Institute of Architects, therefore, would recommend to the Committee on the State Building Code the adoption of the Standard Building Code and the other codes of the Southern Building Code Congress as the basis for the proposed uniform minimum State Building Code; amended in those areas only where consideration of a State wide concern justifies such amendments and with further amendments of area wide concern emanating from the jurisdictions wherein those special concerns exist.*


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